INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
( Not for submission under 37 CFR 1.99)

Application Number		10566063		
Filing Date		2006-01-26		
First Named Inventor	Alan Martin Birch			
Art Unit		1626		
Examiner Name	Not yet assigned Valerie Rodriguez-Garci			
Attorney Docket Numb	er	101159-1P US		

				U.S.	PATENTS	Remove
Examiner Initial*			Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	3706810		1972-12-19	American Cyanamid Company	
	2	4599198		1986-07-08	Pfizer Inc.	
	3	4668769		1987-05-26	Dennis J. Hoover	
	4	4692522		1987-09-08	Merck & Co., Inc.	
	5	4720503		1988-01-19	Merck & Co., Inc.	
	6	4751231		1988-06-14	Merck & Co., Inc.	
	7	4786641		1988-11-22	Bayer Aktiengesellschaft	
	8	4794120		1988-12-27	Synthelabo	

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT
( Not for submission under 37 CFR 1 99)

Application Number		10566063
Filing Date		2006-01-26
First Named Inventor	Alan	Martin Birch
Art Unit		
Examiner Name	Not y	et assigned
Attaman Daalcat Norman		4044E0 4D HC

	9	5863903		1999-01-26		Novo Nordisk A/S				
	10	5998463		1999-12	2-07	Pfizer Inc.				
If you wis	h to ac	l dd additional U.S. Pate	nt citatio	n inform	ation pl	ease click the	Add button.		Add	
			U.S.P	ATENT	APPLI	CATION PUB	LICATIONS		Remove	
Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publica Date	ation	Name of Pate of cited Docu	entee or Applicant ment	Releva	s,Columns,Lines where ant Passages or Releves Appear	
	1									
If you wis	h to a	dd additional U.S. Publi	shed Ap	plication	citation	n information p	lease click the Ad	d buttor		
				FOREIG	ON PAT	ENT DOCUM	ENTS		Remove	
Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup>		Kind Code4	Publication Date	Name of Patente Applicant of cited Document	e or	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T5
	1	200740	DD		A	1983-06-08	Karl Gewald et. al.			✓
	2	4445968	DE		A1	1996-06-27	Bayer AG			Z
	3	0697403	EP		A1	1996-02-21	Sanofi			¥
	4	0846464	EP		A2	1998-06-10	Pfizer Inc			F

Application Number		10566063
Filing Date		2006-01-26
First Named Inventor	Alan	Martin Birch
Art Unit		
Examiner Name	Not y	et assigned
Attorney Docket Numb	er	101159-1P US

5	0884050	EP	A1	1998-12-16	Novo Nordisk A/S		
6	0978279	EP	A1	2000-02-09	Pfizer Products Inc.		
7	1088824	EP	A2	2001-04-04	Pfizer Products Inc.		
8	1125580	EP	A2	2001-08-22	Pfizer Products Inc.		
9	1134213	EP	A2	2001-09-19	Pfizer Inc.		
10	1136071	EP	A2	2001-09-26	Pfizer Products Inc.		
11	1145717	EP	A2	2001-10-17	Pfizer Products Inc.		
12	1149580	EP	A1	2001-10-31	Pfizer Products Inc.	<b>)</b> -	
13	1177791	EP	A2	2002-02-06	Pfizer Products Inc.		
14	1340500	EP	A1	2003-09-03	Pfizer Products Inc		
15	2081747	ES	A1	1996-03-01	Laboratories del Dr. Esteve, S.A.		Z

Application Number		10566063
Filing Date		2006-01-26
First Named Inventor	Alan	Martin Birch
Art Unit		
Examiner Name	Not y	et assigned
Attorney Docket Numb	er	101159-1P US

				7		
16	04179949	JP	A	1992-06-26	Fuji Photo Film CO., Ltd.	Z
17	2001 089368	JP	A	2001-04-03	Tanabe Selyaku Co., Ltd	Z
18	2001 206856	JP	A	2001-07-31	Pfizer Products Inc.	Z
19	2001 247565	JP	А	2001-09-11	Pfizer Products Inc	Z
20	2004 196702	JP	А	2004-07-15	Yamanouchi Pharmaceuticals Co., Ltd.	Z
21	93/25574	wo	A1	1993-12-23	Pfizer Inc.	
22	95/24391	wo	A1	1995-09-14	Novo Nordisk A/S	
23	96/39384	wo	A1	1996-12-12	Pfizer Inc.	
24	96/39385	wo	A1	1996-12-12	Pfizer Inc.	
25	97/09040	wo	A1	1997-03-13	Novo Nordisk	
26	97/31901	wo	A1	1997-09-04	Mikael Bols	

Application Number		10566063
Filing Date		2006-01-26
First Named Inventor	Alan	Martin Birch
Art Unit		
Examiner Name	Not y	et assigned
Attorney Docket Numb	er	101159-1P US

27	97/45425	wo	A1	1997-12-04	Fujisawa Pharmaceutical Co., Ltd.	
28	98/27108	wo	A2	1998-06-25	Fujisawa Pharmaceutical Co., Ltd.	
29	98/40353	wo	A1	1998-09-17	Novo Nordisk A/S	
30	98/50359	wo	A1	1998-11-12	Novo Nordisk A/S	
31	99/26659	wo	A1	1999-06-03	Pfizer Products Inc.	
32	99/36393	wo	A1	1999-07-22	Tanabe Seiyaku Co., Ltd.	
33	00/42213	wo	A1	2000-07-20	The Research Foundation of State University of NY	
34	00/47206	wo	A1	2000-08-17	Novo Nordisk A/S	
35	01/05954	wo	A1	2001-01-25	Isis Pharmaceuticals Inc	
36	01/23347	wo	A1	2001-04-05	Novo Nordisk A/S	
37	01/32622	wo	A1	2001-05-10	AstraZeneca AB	

Application Number		10566063
Filing Date		2006-01-26
First Named Inventor Alan		Martin Birch
Art Unit		
Examiner Name Not y		et assigned
Attorney Docket Number		101159-1P US

38	01/32654	wo	A2	2001-05-10	Societe de Conseils de Recherches et D'App Sci	Z
39	01/52825	wo	A2	2001-07-26	Novartis AG	
40	01/68055	wo	A1	2001-09-20	Pfizer Products Inc.	
41	01/68092	wo	A2	2001-09-20	Pfizer Products Inc.	
42	01/68603	wo	A2	2001-09-20	Bristol-Myers Squibb Co.	
43	01/94300	wo	A1	2001-12-13	Aventis Pharma Deutshland GMBH	Z
44	01/96311	wo	A2	2001-12-20	Bristol-Myers Squibb Company	
45	01/96347	wo	A1	2001-12-20	Bristol-Myers Squibb Company	
46	02/20530	wo	A1	2002-03-14	AstraZeneca AB	
47	02/26714	wo	A1	2002-04-04	Takeda Chemical Industries	Z
48	02/34718	wo	A1	2002-05-02	Richter Gedeon Vegyeszeti Gyar RT	

Application Number		10566063
Filing Date		2006-01-26
First Named Inventor Alan		Martin Birch
Art Unit		
Examiner Name	Not y	et assigned
Attorney Docket Number		101159-1P US

	49	02/36583	wo	A1	2002-05-10	Shionogi & Co., Ltd.		<b>7</b>
	50	02/80844	wo	A2	2002-10-17	Genzyme Corporation		
If you wis	h to a	dd additional Fore	eign Patent Docur	nent citatio	n information p	lease click the Add button Add		_
			NON-P	ATENT LIT	ERATURE DO	CUMENTS	/e	
Examiner Initials*	Cite No	(book, magazine		symposium	, catalog, etc),	the article (when appropriate), title date, pages(s), volume-issue numl		T5
	1	CROCHET R.A.,	CROCHET R.A., et al., J. Het. Chem., "Synthesis of Substituted Thieno[2,3-b] pyrroles," April 1974, 143-150, Vol. 11.					
	2	HARTMAN G.D., et al., "The Synthesis of 5-Alkylaminomethylthieno[2,3-b]Pyrrole-5-Sulfonamides," Heterocycles, 1989, 1943-1949, Vol. 29(10).						
	3	MCCORMACK J.G., et al., "Pharmacological Approaches to Inhibit Endogenous Glucose Production as a Means of Anti-diabetic Therapy," Curr. Pharmaceutical Design, 2001, 1451-1474, Vol. 7.						
	4	JAKOBSEN P., e 2001, 733-744, V		Potential Inh	nibitors of Liver C	ilycogen Phosphorylase.," Bioorganic	Med. Chem.,	
	5	TREADWAY J.L., et al., "Glycogen phosphortase inhibitors for treatment of type 2 diabetes mellitus," Exp. Opin. Invest. Drugs, 2001, 439-454, Vol. 10(3).						
	6	RATH V.L. et al., Packing of the Ca	"Activation of Huma atalytic Core," Mol.	an Liver Glye Cell, July 20	cogen Phosphor 00, 139-148, Vol	vlase by Alteration of the Secondary St	tructure and	
	7		lorophenyl)-1,4-dihy			osphorylase a by the potential antidiab e-3,5,6-tricarboxylate," Protein Sci., 19		

 Application Number
 10566063

 Filing Date
 2006-01-26

 First Named Inventor
 Alan Martin Birch

 Art Unit
 Examiner Name
 Not yet assigned

 Attorney Docket Number
 101159-1P US

	8	VENKATARANGAN P., et al., "Prediction of Ligand-Receptor Binding Thermodynamics by Free Energy Force Field Three-Dimensional Quantitative Structure-Activity Relationship Analysis: Applications to a Set of Glucose Analogue Inhibitors of Glycogen Phresphorylase." J. Med. Chem., 1999, 2193-2179, Vol. 42	
	9	HOOVER D.J., et al., "Indole-2-carboxamide Inhibitors of Human Liver Glycogen Phosphorylase," J. Med. Chem., 1998, 2934-2938, Vol. 41.	
	10	MARTIN W.H., et al., "Discovery of a human liver glycogen phosphorylase inhibitor that lowers blood glucose in vivo," PNAS, Feb. 1998, 1776-1781, Vol. 95.	
	11	SCMAN G., et al., "The Nature of the Binding Site for Aromatic Compounds in Glycogen Phosphorylase b," Biochem. J., 1975, 369-371, Vol. 147.	
	12	SOMAN G., et al. "Aromatic Compounds as Allosteric Inhibitors of Glycogen Phosphorylase b," Biochimica et Biophysica Acta, 1974, 359-362, Vol. 358.	
	13	ROSAUER K.G., et al., "Novel 3,4-Dihydroquinolin-2(1H)-one Inhibitors of Human Glycogen Phosphorylase a," Bioorganic & Medicinal Chemistry Letters, 2003, 4385-4388, Vol. 13.	
	14	TEAGUE J. et al., "Mobilisation of Tissue Glycogen Following Inhibition of Glycogen Phosphorylase in fa/fa Rat," Diabetes, 53, Supp. 2, 2004, A365, 1521-P.	
	15	VERTIGAN H. et al., "Impact of cell glycogen content on modulation of hepatocyte glucose metabolism by pharmacological agents," Diabetologia, 2004, A214, 589, Vol. 47, Supp.1.	
Ī	16	FONT M. et al. "Indoles and pyridazino[4,5-b]indoles as nonnucleoside analog inhibitors of HIV-1 reverse transcriptase", European Journal Med Chem, 1995, 963-71, Vol. 30.	
	17	LIN T, et al. "Effects of Protein Binding and Experimental Disease States on Brain Uptake of Benzodiazepines in Rats", J Pharmacology & Eptl Therapeutics, 1990, 45-50, Vol. 253(1).	
		VADNAVAS A at al. "Quinolone Derivatives: Sunthesis and Binding Evaluation on Chalegratorinin Recentors" III	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /V.R.G

Farmaco, 1996, 341-350, Vol. 51(5).

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

( Not for submission under 37 CFR 1.99)

Application Number		10566063		
iling Date		2006-01-26		
irst Named Inventor Alan I		Martin Birch		
Art Unit				
Examiner Name Not y		et assigned		
Attorney Docket Number		101159-1P US		

19	PARSONS W H. et al. "Cholecystokinin Antagonists. Synthesis and Biological Evaluation of 3-Substitued Benzolactams", J Med Chem, 1989, 1681-5, Vol. 32.	
20	FREEMAN S., et al., "Effect of Glucose on Rat and Human Liver Glycogen Phosphory/asea Activity and Potency of a Glycogen Phosphory/asea Inhibitor," Diabetes, 52, Supp., 2003, A340, 1470-P.	
21	TURNBULL A., et al., "Pharmacological Inhibition of Glycogen Phosphorylase (GP) Lowers Plasma Glucose in Rat Models of Type 2 Diabetes," Diabetes, 52, Supp., 2003, A343, 1485-P.	
22	BIRCH A., et al., "Novel Thienopyrrole Glycogen Phosphorylase Inhibitors: In Vitro SAR and Crystallographic Studies," Poster, Cambridge Med Chem Symposium, Sept 2003.	
23	HUDSON S., et al., "The effect of a glycogen phosphorylase inhibitor upon muscle fatigue in anaesthetised rats," J. Physiol., 2002, 52-53, Vol. 539.	
24	VERTIGAN H. et al., "Impact of cell glycogen content on modulation of hepatocyte glucose metabolism by pharmacological agents", EASD Munich, 2004.	
25	BARTLETT J. et al., "In Viro and In Vivo Profile of Gpi688, a Novel, Potent Inhibitor of Glycogen Phosphorylase", ADA San Diego, 2005.	
26	BENNETT S N L. et al., "Novel Orally Active Amino-Indan Inhibitors of Glycogen Phosphorylase", Cambridge Med Chem Conference, Sept 2005. Poster EOM.	
27	GREEN A R. et al., "The Glycogenic Action of Protein Targeting to Glycogen in Hepatocytes Involves Multiple Mechanisms Including Phosphorylase Inactivation and Glycogen Synthase Translocation", J Biol Chem, 2004, 46474-46482, Vol. 279(45).	
28	ROBERTS P.A. et al., "The temporal relationship between glycogen phosphorylase and activation of the pyruvate dehydrogenase complex during adrenaline infusion in resting canine skeletal muscle", J Physiology, 2002, 297-304, Vol. 545(1).	

If you wish to add additional non-patent literature document citation information please click the Add button Add

 Application Number
 10566063

 Filing Date
 2006-01-26

 First Named Inventor
 Alan Martin Birch

 Art Unit
 Examiner Name

 Not yet assigned

 Attorney Docket Number
 101159-19 US

	EXAMINER SIGNAT	TURE	
Examiner Signature	/Valerie Rodriguez-garcia/	Date Considered	10/03/2008
	ence considered, whether or not citation is in	conformance with MPEP 609 D	raw line through

citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at <a href="https://www.USPTO.GOV">www.USPTO.GOV</a> or MPEP 901.04. <sup>3</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if Embilsh Inaulose translation is attached.

10566063

Examiner Name Not yet assigned
Attorney Docket Number 101159-1P US

### CERTIFICATION STATEMENT

Application Number

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1,97(e)(1).

OR

That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(Z).

See attached certification statement.

Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

None

#### SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Lucy Padget/	Date (YYYY-MM-DD)	2006-05-19
Name/Print	Lucy Padget Registration No: L0074	Registration Number	

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22314-1450.

### Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary, and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.
- A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement necotations.
- A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 3. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 125 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
  - A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.